Guard against sun sculd.

Treat the dairy cow kindly.

The dairy increases the crop yield.

Not every man is cut out for a dairy

Remove all ailing fowls from the

Kaffir corn is a splendld feed for

A heifer twin with a bull seldom, if ever, breeds.

Keep a little gas tar on hand and apply it for scaly legs.

The good dairy cow is a lady and ought to be treated as such

Alfalfa leaves contain most of the feeding value of the alfalfa plant.

Orchard grass makes a better mixture with clover than timothy does.

Cream for churning should be al lowed to sour at about 65 degrees F.

the Hon. Calves should have daily outdoor exercise when the weather will per-

.The value of skim-milk makes the separator necessary on every dairy farmanali direct locate at

If you are going to plant a new orchard next spring, make your selections now.

Any dairy farmer can have plenty of cream for sale when the cows are on pasture

Hens won't lay in such severe cold weather unless extra good care is taken of them.

An old sow, if not too clumsy and fat, will raise better and stronger pigs than a young one.

Nothing ever came so near turning December into June for dairy cattle and sheep as the silo.

Probably the best results come from pruning the orchard rather vigorously every two or three years.

There is a great tendency on the part of many to neglect the colts on

When spraying do not work with bare hands. They'll be sore if you do. Put on a pair of rubber gloves.

the farm during the winter.

Scrubs do not produce the best market animals, and this is the final test for all meat producing animals.

Field roots are an excellent feed months and especially for the ewe in winter.

The cow barn should and can be prove objectionable to any of the of the horse. farm women.

When a fowl is found to be suffering from a cold it is best to put it in a warm, well lighted coop by itself and heavy grain feeds. treat It there.

Corn is the best crop to plant on new land, as the constant working will put the ground in good order for seeding in the fall.

Cows permitted to continue their natural lactation periods, nine to ten they are not as palatable, the cows months, will usually cease milking don't like them so well. with very little trouble.

If you want to make first-class cows from your young helfers, feed well, and don't forget to handle them.

Remember that an egg contains 90 per cent of water, and that no matter how much you feed the hens, unless fodder does not have to buy any high-

egga,

The dairy cow brings to impoverished, half-farmed lands methods that give larger profits and greater improvement than come from other types of farming.

- Lilvane Sheep, like other animals, are creaures of habit, and should always be handled by the same attendant, who should move among them gently and give notice of his approach by speaking to the flock.

Do not undertake poultry farming for a livelihood without making arrangements to produce an abundance of fruit, vegetables, and green truck you also take extra care of the fowls for the family and for the poultry. and also for a cow or two and a few selves, bathing their heads and feed-

Colts need exercise

Keep the apple tree low.

Cold does not kill insects, Ice should be cut when it is sound

Plenty of salt ought always to go with dry feeding 0.0012 bin 9 vil

A half fed colt will never make a first-class draft horse.

Rapidity is one of the great essenials in milking a cow.

Never whip a borse when he shies. will increase his fear.

cattle in winter than in summer. Flavor is the one great quality of

In many cases it is safer to dehorn

butter fat over other kinds of fat.

Quite often the flavor in butter is spofled by making the cream too sour.

The flavor of butter depends mainly upon the cream previous to churning and the Art of the Art of Mark

Lead the colt with a halter. A bit will make sore his mouth and disposition.

The cow is an animal that delights in warmth, and it pays to keep her comfortable, -

Absolute comfort and contentment should also be enjoyed by the steers at all times.

It is well to give the fowls' quarters an extra bedding of hay and straw in

The old saying had it that the old sow's pigs were 2 weeks old the day they were born.

Every poultryman at this time of year is trying to seek out the causes of poor hatching. Osteopathic Physician.

Ground limestone is useful in any soll that is so deficient in lime that here is sourness present.

A sheep will contract a cold much more quickly in a draughty barn than it will right out in the open,

The high-headed tree is easier culivated, but the low-headed trees makes the fruit picking easier.

The length of the stall should be adjusted by the size of the cow, and always used by the same cow.

Rabbits are very particular about their food and any taint on the tree will keep them from injuring it.

Nothing better than campherated oil for an udder inflammation. For scratches or sores apply vaseline.

The city dealer profits by the laziness of the grower, by grading and repacking his badly assorted fruit.

There is nothing like silage to keep the dairy cow's appetite on edge throughout the long winter period.

Each bedded cow or horse will make a large two-horse cartload of good quality manure for each month stabled.

The price of horses seems to be rather on the down grade, although good ones sell nearly as high as ever.

One way to save feed bils is to protect the cows from flies during the for all sheep during the winter summer and the cold weather in the

Horses are very fond of a variety, and fussing always pays in the betkept so clean that milking will not ter condition and greater usefulness

> Good feeding does not consist of stuffing the horse for a number of weeks before he is put to work on

> The number of acres required to feed a herd of 20 cows in full milk will depend largely upon the condition of the ground and the season.

Beans are not as good a feed for live stock as peas, simply because

In a time of high-priced dairy products and high-priced feed the dairyman who raises his own feed comes while they are carrying their first calf out far ahead of the one who has his feed to buy.

The dairyman who has alfalfa, clover or cowpea hay to go with his corn you give them water there can be no priced mill feed to balance up the cow's rations. His bas district

Never milk the cow with wet hands. No more filthy habit is indulged in than that of milking on the hand in order to strip the test. Milking should always be done with a full, dry hand.

use voting and avoid of said A well-bred colt, if properly taken care of and fed the right kind of feed during his first three years of life, will bring from \$75 to \$100 more when three years old than the one that is neglected and poorly fed.

Several roup remedies are advertised, and doubtless some of them are helpful, but none are any good unless by placing them in a room by theming them good rich food.

## PRODUCTION OF SUGAR BEETS DOES NOT NEAR MEET DEMAND

Manufacture of Article in United States, Despite Wonderful Progress of Culture in Past Few Years, Has Not Even Kept Pace With Increased Rate

PORSTEDT & Sentiamento to BO C. CLINTON, Iowal

The first refined beet-root sugar produced in commercial quantity was made about 100 years ago, at a cost of approximately 80 cents a pound. The cost of producing cane sugar was then somewhat higher than that of beet sugar.

The amount of raw sugar extracted from the beet at that time varied from 4 to 6 per cent, and the amount of refined sugar obtained was from 1 to 2 per cent of the weight of the

eet. (IAMOG-M ZAM)
The cost of producing an acre of beets was estimated at approximately \$35, while the yield was from 6 to 25 tong her acre.

The advances that have been made in cultural methods have been offset to a very great extent by the increased cost of labor in the United States, so that the actual reduction in the cost of producing beet sugar



Worlen Weeding Beets CA

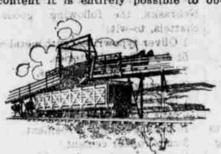
has been due to the improvement of the heet or to less expensive operations in extracting and refining the product.

Thorough cultivation is another factor in producing good sugar beets. It is a common saying among the Germans that "the sugar must be hoed into the beet."

In no time of its life should a sugar beet be allowed to stop growing, for if it once becomes stunted it is doubtful whether it will ever make as good a beet as it would have been under conditions of continuous growth.

Another way the beet has been improved is by increasing its sugar content. This has been done without increasing the size of the beet.

If a largely increased yield of beets is combined with a much higher sugar content it is entirely possible to ob-



Unloading Beets.

tain three times as much sugar per acre as is produced on an average at the present time.

The present average yield of beets per acre in this country is about 10 tacks since tacks are good, says tons, and the percentage of sugar actually extracted and refined does not exceed 12, making the average yield of sugar per acre approximately 2,400 pounds.

Yields of more than 30 tons of beets per acre are sometimes obtained, and yields of more than 20 tons are com-

From 20 to 25 per cent of the sugar

in the best has been reported so frequently that it is safe to assume that an average sugar content of 18 per in this country. Regular shipments cent is within the limits of possibility. of European potatoes arrive in New acre and an average sugar content of west as Chicago,

A great many farmers are like the

debauchery he woke up one morning

with 25 cents in his pocket, the last

cent he had. Walking into a saloon,

"Yis, yis," said Jack; "no matter,

"All in?" said the barkeeper.

to join a gang back to the woods.

After two weeks of drunkenness and weather.

in his pocket.

RUINED BY RAIN, SNOW AND SUN

Timber Jack who after working hard in regard to the use of their valuable all winter in the woods without seeing machinery. They work hard to get the

the face of any human being except money to buy plows, reapers and other

his fellow workmen, came out in the labor-savers, and then deliberatel

spring with his season's wages intact squander their savings by leaving their

he threw the coin on the bar, ordered within two years by exposure to the

two drinks and quickly disposed of weather. A fine reaper which was only

again be used.

18 per cent could be reached, we would have an average yield of 7,200 pounds of sugar per acre.

Clay loams are very satisfactory for sugar-beet production, provided other conditions are favorable; but more depends upon the physical condition of the soil and upon methods of cultivation than upon the particular kind or variety of soll used. The soll, however, should be well supplied with humus and well drained.

During the past few years there has been a remarkable advance in the price of farm lands, especially in those localities where beet-sugar factories are in successful operation, bu The production of single-germ beet-

seed is a method of thinning beets before the seed is planted. Commercial beet seed consists for the most part of from two to given individual seeds welded by nature into one mass.

It is evident that plants produced from such a mass of sceds must of necessity be very close together, and thus far no mechanism has been devised whereby the plants can be prop-

erly thinned. Thus hand labor has to be resorted to.

Repeated efforts have been made to break up the seed balls by passing them through various forms of rollers. but the seed coats, are an hard that any device that has been tried not only breaks the coats but likewise the seed balls, thus destroying the germ! The department of agriculture has been more successful in this line by its effort to produce a single-genm seed, and its scientists have within the past year increased the production of single-germ seed from 2 to 25 per cent.

The yearly consumption per capita has facreased 8 pounds during the past ten years, that is, approximately



Cultivating Beets With Electric Hees. 645,000,000 pounds, or 330,000 tons, more sugar was consumed last year than would have been consumed ten years ago had the population at that

time been the same as it is today. This goes to show that the manufacture of beet sugar in the United States, in spite of its wonderful prog-ress during the past few years, has not even kept pace with the increased rate of consumption. HOME AT HOME

Glazing the Poultry-House. In replacing glass in poultry house windows it pays to use putty. Without it the panes cannot be made tight and are much more likely to be broken. I remove all old putty with a thin knife, scraping the wood well where the least possible amount of floor glass in the frame I use slim, headless writer in an exchange. I then take a small portion of putty, roll it between the bands mus at forms a long stender rope, press up against the sash with the thumb, and smooth down with

quired to put a glass in in this way. Potatoes in Europe. There are three or four times as many polatoes grown in Europe as If an average yield of 20 tons per York and occasionally reach as far

Many farmers operate on Jack's play

machinery to be destroyed by the

On one farm the writer saw at leas

\$400 worth of machinery which had

been rendered practically useless

three and a half years old was left

a putty or blunt-pointed kitchen knife.

More than 10 minutes are seldom re-

## CO

Side View of Colony House.

pen for breeding bens in the early feet. It is built on runners four inches square, extending lengthwise of the building. Pieces of 2 by 4 Inch material are placed on edge for joists 4 feet apart; and the floor is then laid before the frame work is denstructed. The studding is then foensiled to the floor, being 6 feet long in front and 4 feet in the back, and placed three feet apart. Two by four luch pleces are used as plates. The door in the center is 2 feet 6 inches by 6 feet. On each side of the door is a nine light 8 by 10 inch glass window, hinged at the top to swing out and fitted in a way to permit its removal in sumnen. The house can be easily hauled from one location to another, largely eliminating the question of yarding young chicks, and making the summer care of growing chicks comparatively ensy.

Simplicity of construction, economy of building material, efficiency of ventflation and lighting, with due regard to location and dryness are the essential points to be considered in building a poultry plant. All fixtures should be movable and simple in construction, being so placed as to utilize

any has fallen out. For holding the space. Feed boxes, hoppers, nests, etc., should have sloping tops and windows should be arranged in a way to prevent birds from roosting in objectionable places. A little forethought in planning will make the house much more satisfactory and convenient.

> "Knockdown" Affair, Invented by Indiana Man, Can Be Taken Apart in Few Minutes.

A sort of "knockdown" chicken coop has been designed by an Indiana man. It can be put together in a minute or taken apart and laid away in six fist surfaces in the same time. The coop is of metal, and has rolled bead edges for slidable engagement with each other. One of the most



ingenious features of the whole affair, however, is the front of coop .. This has a revolving cir plate pivotetd to it, and in this plate are three holes two large and one small. One of the large holes is covered with wire netting. In the lower part of the front of the coop is a large hole the size of two on the plate: When the old hen and chicks are to be kept in the coon plate is turned southat the screened opening covers the door. When the hen is to stay and the chicks are to have free exit the small hole is turnstanding after the last wheat cutting. ed down. When the whole family can go out the large hole is moved and is already so rusted and warped aisy come, alsy go," and he walked out and weather-beaten that it can never

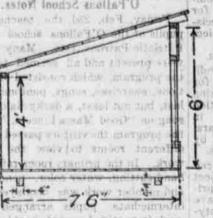


## PORTABLE COLONY HEN HOUSE

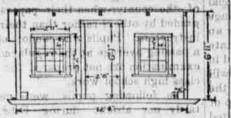
Structure Is Sultable for Brooding Early Chicks and May Be Used on Range in Summer,

(By H. L. KEMPSTER, Michigan Experi-

The Illustrations show a portable colony house which has a universal use, being suited for brooding early chicks, when fitted up with indoor brooders. It may be used as a colony house on the range for growing chicks during the summer, or as a special



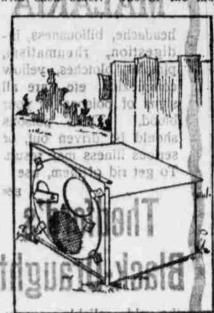
The house is 714 feet by 12



Front View.

on daid

COOP IS MADE COLLAPSIBLE the past"



onipiben Collapsible Cooper

in front of its mate.



Mault Muller, when 'twee 8 below. Stood on the sidewalk, shoveling mow. The wind was sharp, the snow was deep, The drifts were very wide and steep. She shoveled off the wide front walk, And then she paused a while to talk "Tvo worked," she said, "two hours and To clear this pathway to our door. Two showeled off the side pathi too; My fingers and my wrists are blue, Eve shoveled of the garden path, I fell down, and argse to wrath bad The snow has mreed in my whoesal Tomorrow I'll have the ab-choose " My feet are damp and still and cold. This shovel seems too much to hold. rad eronrevou neolidates that settleres that very the very the control of the con make pink cheeks and lustrous

"And I suppose good health arrives From this, if one the task survives. "Now I'll go in and shovel coal inc.
Into the chilling furnace bowl. 'And then I'll take the ushes out And scatter them all roundabout "Oh, would I had remained a spin-Ster, then this tolling had not been." Into the house she turned to trudge— For Mand, you wee, had wed the judge!

Evils of Good Advice, Not "Say!" said the man with the worried look, "do you remember giving me a lot of advice on how to conduct my love affairs about two months ago?" Yes," replied the man with the

wise expression.
"Told me if I wanted to win the girl I should make love to her moth-"Uh-huh an . Dell

"Said if I could get the old lady on my side all I had to do was to toddle around with a ring and say, 'When?' to the girl and The wise man nodded! . agastd

"Sald for me to compliment the mother on her youthful appearance," continued the worried man, "and give her a folly about how sad it was that the young ladies of the present day were not to be compared with those of

"Yes. Yes. You won the girl, I suppose?" meawled matel "Yes, I did-not. The old lady has sued her husband for divorce and me for breach of promise," there to

Twas True, Twas False of Mamma is terribly angry with me because I let you clip that lock of my hair to remember me by," says the sweet young thing to the ardent admirer.

"She is? Doesn't she approve of such a token of affection?" asks her "She said the sentimental idea was all right, but that I should have made you clip a lock of my real hair. She said she paid thirty dollars for that switch for me and that it was practically ruined now, since you cut that piece out of it."

A Very Bad Spell.

The new reporter opened his account of the fever epidemic by writ-"The health board reports fifty new cases of tiefoyd fever."

The city editor in a mild manner, as is the wont of city editors, observed to the new reporter that his spelling was very bad. Whereat the new reporter explained; "I had a bad spell of typhoid

when young and it never got out of my system. Next day he was studying the "help wanted" columns again.

Now, does my tollet seem complete?" She asked, with pretty pout. Her husband gazed at her and smiled, Then murmured, half in doubt: It might be well to wear a sign

The Usual Way, of Jany Askit-Who is the fellow who is so energetic in discoursing on Jigsby's

Which read: Fresh Paint-Look

a Out. "error a no beard had

Tellit-That's, his bosom friend, of course. all that that it sandmam

Mebus Dresbit

faulta?